

REMARKS

This is a full and timely response to the final Office Action dated August 19, 2008, in which Applicants' Claims 3-20 were rejected and Applicants' Claims 1 and 2 were allowed. By way of this Amendment, Applicants' Claims 3, 4, and 7 have been amended; and Applicants' Claims 8 and 14-20 have been cancelled. Reconsideration of pending Claims 3-7 and 9-13, and continued allowance of Claims 1 and 2, is respectfully requested in view of the following remarks.

This Amendment, submitted pursuant to 37 C.F.R. § 1.116, is an earnest attempt to advance prosecution and reduce the number of issues and is believed to clearly place this Application in condition for allowance. This Amendment was not earlier presented because Applicants earnestly believed the prior Amendment placed the subject Application in condition for allowance. Moreover, entry and consideration of this Amendment are proper under 37 C.F.R. § 1.116 for at least the following reasons. The Amendment overcomes all of the rejections set forth in the Office Action dated August 19, 2008. The Amendment does not raise new issues requiring further search or consideration. Additionally, the present Amendment places the application in better form for appeal, which Applicants intend to pursue, if necessary. Accordingly, entry of this amendment is proper under 37 C.F.R. § 1.116 and respectfully requested.

I. Telephone Conversation with Examiner occurring on September 15, 2008

Applicants wish to thank Examiner Goldfarb for engaging in a telephone conversation on September 15, 2008. The telephone conversation concerned Applicants' independent Claim 3, which currently stands rejected under 35 U.S.C. § 112, second paragraph. In particular, the conversation concerned the manner in which Applicants'

independent Claim 3 could potentially be amended to overcome the 35 U.S.C. § 112 rejection set-forth on pages 2-3 of the Office Action. No agreement was reached as a result of this conversation.

II. Claim Rejections under 35 U.S.C. § 112

Beginning page 2, the Office Action rejects Applicants' Claims 3-13 under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicants regard as their invention. With respect to Applicants' independent Claim 3, in particular, the Office Action makes the following statement:

The claim(s) are narrative in form and replete with indefinite and functional or operational language. The structure which goes to make up the device must be clearly and positively specified. The structure must be organized and correlated in such a manner as to present a complete operative device. The claim(s) must be in one sentence form only. Note the format of the claims in the patent(s) cited.

As explained below, Applicants have amended Claim 3 to more clearly define that which Applicants regard as their invention and thereby overcome the rejection asserted against Claim 3 under 35 U.S.C. § 112, second paragraph.

Please note that Applicants' Claims 4 and 7 have also been amended to accord with terminology introduced into Applicants' independent Claim 3 by way of the amendment set-forth above and discussed below.

Applicants' Claim 8 has been cancelled without prejudice or disclaimer of the subject matter contained therein.

III. Claim Rejections under 35 U.S.C. §§ 102 and 103

On page 3, the Office Action rejects Applicants' Claims 14, 15, 19, and 20 under 35 U.S.C. § 102(a) as anticipated by U.S. Pub. 2002/0145077 ("the Shultz reference"). Similarly, on page 4, the Office Action rejects Applicants' Claims 16-18 under 35 U.S.C. § 103(a) as unpatentable over the Shultz reference in view of U.S. Pat. No. 6,285,927.

Applicants' Claims 14-20 have been cancelled without prejudice or disclaimer of the subject matter contained therein.

IV. Allowable Subject Matter

Applicants acknowledge with appreciation the statement appearing on page 6 of the Office Action indicating that Applicants' Claims 1 and 2 are allowed.

Also on page 6, the Office Action states that Applicants' independent Claim 3 would be allowable if rewritten to overcome the rejection asserted under 35 U.S.C. § 112, second paragraph, and set-forth on pages 2-3 of the Office Action.

In keeping with the Office Action's suggestion, Applicants have amended independent Claim 3 to more clearly recite that which Applicants regard as their invention. Unfortunately, in setting-forth the rejection under 35 U.S.C. § 112, second paragraph, on page 3, the Office Action provides little guidance as to the manner in which Applicants' Claim 3 might be amended to render Claim 3 sufficiently definite to satisfy the requirements of 35 U.S.C. § 112, second paragraph. For this reason, Applicants engaged in a telephone conversation with Examiner Goldfarb on September 15, 2008, to discuss potential amendments to Applicants' Claim 3. Based upon this

telephone conversation and based upon Applicants' currently-allowed independent Claim 1, Applicants have amended Claim 3 in the following manner.

Applicants' amended independent Claim 3 is directed to an apparatus for controlling spacecraft (S/C) momentum using control moment gyros (CMGs). The apparatus comprises a CMG array including at least first, second, and third CMGs. As amended, Applicants' independent Claim 3 recites that the first CMG includes structural elements akin to the structural elements recited in Applicants' independent Claim 1; i.e., a rotor, a gimbal, a mount, a base, a plurality of locking features (e.g., detents), a locking pin, and drive (referred to as a "drive mechanism" in Claim 1). Furthermore, as amended, Claim 3 specifies that these structural elements are inter-related as recited Claim 1. As noted above, Claim 1 has been allowed and, therefore, found sufficiently definite to satisfy the requirements of 35 U.S.C. § 112, second paragraph. Thus, Applicants respectfully submit that amended independent Claim 3 should likewise be found sufficiently definite to satisfy the requirements 35 U.S.C. § 112. Furthermore, after entry of the above amendment, Claim 3 continues to recite novel subject matter, such as a locking pin and associated locking features (e.g., detents). See page 6 of the Office Action stating that "the plurality of detents in the rotating base and related locking pin are novel features for a CMG, especially for use in a space vehicle."

In view of the above, it is respectfully submitted that Applicants' independent Claim 3, as amended, is sufficiently definite to satisfy the requirements of 35 U.S.C. § 112, second paragraph. Considering this, and considering the statements appearing on page 6 of the Office Action pertaining to allow subject matter, it is further respectfully submitted that Applicants' amended independent Claim 3 is allowable.

Applicants' dependent Claims 4-7 and 9-13 are also believed sufficiently definite in view of the amendment to Applicants' independent Claim 3 discussed above. Furthermore, in view of the statements appearing on page 6 of the Office Action, Applicants Claims 4-7 and 9-13 are believed allowable at least in view of their dependency from Applicants' amended independent Claim 3.

As previously stated, Applicants' Claim 8 has been cancelled without prejudice or disclaimer of the subject matter contained therein.

V. Conclusion

Considering the foregoing remarks and amendments, Applicants respectfully submit that the Application is now in condition for allowance.

If the Examiner has any comments or suggestions that could place this application in even better form, the Examiner is requested to telephone the undersigned attorney at the below-listed number.

If, for some reason, Applicants have not paid a sufficient fee for this response, please consider this as authorization to charge INGRASSIA, FISHER & LORENZ, PC, Deposit Account No. 50-2091 for any fee which may be due.

Respectfully submitted,
INGRASSIA, FISHER & LORENZ

Dated: October 15, 2008

By: JUSTIN J. LEACH/
Justin J. Leach
Reg. No. 59,220
Agent for Applicant
Telephone (480) 385-5060